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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,679	10/15/2003	Hiroshi Sasaki	05030026AA	3391

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EXAMINER	
LE, NHAN T	
ART UNIT	**PAPER NUMBER**
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/684,679	SASAKI, HIROSHI
	Examiner	**Art Unit**
	Nhan T. Le	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12-23* is/are allowed.

6)☒ Claim(s) *1,3,7,8,10 and 11* is/are rejected.

7)☒ Claim(s) *2,4-6 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *10/15/03, 08/11/04*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "the," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. .

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected since it exceeds words.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "wherein the delay device" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 3, 7, 8, 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 5,416,441) in view of Baldwin (US 20030114127).

As to claims 1, 11, Nagano teaches a power circuit to be used in a communication device (see fig. 1, col. 3, lines 45-68, col. 4, lines 1-22) comprising a transmission power amplifier to amplify a transmission signal having a burst period and a non-burst period occurring alternately in a repeated manner, the power circuit comprising: a power supplying unit (see fig. 1, number 19, col. 3, lines 45-68, col. 4, lines 1-22) to supply a first power to the transmission power amplifier, and a power storing section (see fig. 1, number 10, col. 3, lines 45-68, col. 4, lines 1-22) as a second power redundancy of the first power to be supplied from the power supplying unit to the transmission power amplifier during the non-burst period, and to feed the accumulated second power to the transmission power amplifier in addition to the first power being supplied from the power supplying unit to the transmission power amplifier during the burst period. Nagano fails to teach the power storing section to accumulate. BALDWIN teaches the power storing section to accumulate (see fig. 1, number 115, paragraphs 0023, 0034). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Baldwin into the system of Nagano in order to control the output power level of pa.

As to claim 3, the combination of Nagano and Baldwin teaches a control circuit to control the first power to be fed from the power supplying unit to the transmission power amplifier, wherein the power storing section accumulates as the second power redundancy of the first power to be supplied from the power supplying unit to the transmission power amplifier under control of the control circuit during the non-burst period (see Baldwin fig. 1, number 115, paragraphs 0023, 0034).

As to claims 7, the combination of Nagano and Baldwin teaches wherein the delay device delays a rising and falling of an output current of the power supplying unit at time of start and end of the burst period (see Baldwin fig. 1, number 115, paragraphs 0023, 0034).

As to claim 8, the combination of Nagano and Baldwin teaches wherein the power storing section is made up of an electrical double layer capacitor (see Baldwin fig. 1, number 115, paragraphs 0023, 0034).

As to claim 10, the combination of Nagano and Baldwin teaches wherein the transmission signal is transmitted by communication method (see Nagano fig. 1, number 10, col. 3, lines 45-68, col. 4, lines 1-22, Baldwin fig. 1, number 115, paragraphs 0023, 0034).

Allowable Subject Matter

2. Claims 2, 4-6, 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 2, the applied reference fails to teach wherein the power storing section is so configured as to be charged, when a voltage of the power storing section becomes lower than that of the power supplying unit during the burst period, until a voltage of the power storing section becomes almost equal to a voltage of the power supplying unit during the non-burst period occurring subsequent to the burst period as cited in the claim.

As to claim 4, the applied reference fails to teach wherein the control circuit controls the first power to be fed from the power supplying unit to the transmission power amplifier, by controlling an output current of the control circuit, the output current being fed from the power supplying unit to the transmission power amplifier as cited in the claim.

As to claim 6, the applied reference fails to teach wherein the power storing unit supplies the second power to the transmission power amplifier by discharging when power needed to be consumed by the transmission power amplifier during the burst period is larger than the first power being supplied under control of the control circuit, and wherein the control circuit exerts control so that the power storing section having discharged during the burst period is charged to accumulate redundancy of the first power as the second power when power to be consumed by the transmission power amplifier during the non-burst period is smaller than the first power being supplied under control of the control circuit as cited in the claim.

As to claim 9, the applied reference fails to teach wherein the electrical double layer capacitor has unit cells constructed as a capacitor of sheet-shaped electrical double layer structure which make up stacked cells in which arbitrary numbers of the unit cells are stacked in layer so as to be able to provide a specified withstand voltage and electrostatic capacity as cited in the claim.

As to claim 12, the applied reference fails to teach a transmission power amplifier to amplify a transmission signal having a burst period and a non-burst period occurring alternately in a repeated manner and with a load circuit to consume power required for performing operations, the power circuit comprising: a power supplying unit to supply a first power to the transmission power amplifier and the load circuit; a voltage monitoring section to monitor an output voltage of the power supplying unit and to inform a user of a drop of the output voltage, when the output voltage lowers to a specified reference level; and a power storing section to accumulate as a second power redundancy of the first power to be supplied from the power supplying unit to the transmission power amplifier during the non-burst period, and to feed the accumulated second power to the transmission power amplifier in addition to the first power being supplied from the power supplying unit to the transmission power amplifier during the burst period as cited in the claim.

3. Claims 12-23 are allowed.

Regarding to claims 12, 23, Nagano (US 5,416,441) teaches automatic control circuit for power amplifier; Baldwin (US 20030114127) teaches transmit power control for multiple rate wireless communication. The teaching of these prior arts either combined or alone fails to teach a voltage monitoring section to monitor an output voltage of the power supplying unit and to inform a user of a drop of the output voltage, when the output voltage lowers to a specified reference level.

Dependent claims 13-22 are allowable for the same reason.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okada et al (US 20030224743) teaches apparatus for radio telecommunication system and method of building up output power.

Sasaki (US 20030052645) teaches power source circuit, electronic device being equipped with same power source circuit and control method.

Hayashihara (US 20020025789) teaches leak power ratio detection circuit, mobile communication terminal and control circuit for mobile communication terminal.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Le whose telephone number is 571-272-7892. The examiner can normally be reached on 08:00-05:00 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

N. Le

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